

REMARKS

Reconsideration and allowance of the present patent application based on the following remarks are respectfully requested.

By this Response, no claims are amended, canceled or added. Accordingly, claims 1-20 remain pending in the patent application.

Claims 1-20 were rejected under 35 U.S.C. §103(a) based on Raivisto (U.S. Pat. No. 6,081,601) in view of Lintulampi (WO 98/59513) and Luo (U.S. Pat. No. 5,909,491). The rejection is respectfully traversed.

Applicants note that under 35 U.S.C. §103(c), subject matter developed by another person, which qualifies as prior art only under one or more sections of subsections (e), (f), and (g) of section 102, shall not preclude patentability where the subject matter and the invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. In the present case, Raivisto qualifies as prior art under 35 U.S.C. 102(e)(2) and the subject matter disclosed in Raivisto and the claimed invention were assigned to the same entity at the time of the present invention (priority date June 4, 1999). Although Raivisto and the present patent application cite two different assignees (Nokia Telecommunications Oy in Raivisto and Nokia Networks Oy in the present application), these two names correspond to the same entity. The Trade Name Nokia Telecommunications Oy was changed to Nokia Networks Oy, on October 1, 1999, as evidenced in an extract from the Finnish Trade Register enclosed herewith. Therefore, because Raivisto qualifies as prior art under 35 U.S.C. 102(e) and because the subject matter disclosed in Raivisto and the claimed invention were assigned to the same entity at the time of the present invention, Applicants respectfully submit that Raivisto cannot be used by the Examiner to anticipate claims 1-20.

Lintulampi and Luo do not disclose the features of claim 1-20. As conceded by the Examiner on page 2, paragraph 3, and page 3, paragraph 4 of the Official Action, Lintulampi and Luo can allegedly be used to overcome claims 1-20 only when these references are combined with Raivisto. Accordingly, since Raivisto cannot be used to anticipate claims 1-20, Applicants respectfully submit that Lintulampi and Luo, taken alone or in combination, cannot anticipate claims 1-20.

Furthermore, as noted in Applicants's Response dated May 26, 2004, claims 1-20 are patentable over Lintulampi, Luo or a combination thereof, because none of these references discloses, teaches or suggests a method, a system, a network or a mobile station wherein,

inter alia, a second cipher key, configured to provide ciphering in a second network, is calculated either in the mobile station or in a first network when the mobile station operates in the first network (using a first cipher key). According to embodiments of the Applicants' invention, the second cipher key for the second network is already available when the mobile station is operating in the first network, e.g., before a potential handover situation.

Lintulampi discloses a method of operating a dual mode mobile telephone. Lintulampi also discloses that a handover may be made between GSM and UMTS networks based on the capability of a current network to serve the requested service. According to this method, roaming decisions are made based on service availability in candidate networks. However, Lintulampi does not teach or suggest the feature of arranging calculation of a second cipher key in a first mobile communication network when the mobile station operates in the first mobile communication network and uses a first cipher key, or the feature of transmitting information necessary for calculating the second cipher key from the first mobile communication network to the mobile station, or the feature of calculating a second cipher key at the mobile station to be used for ciphering between the mobile station and the second network. In particular, Lintulampi does not teach or suggest security arrangements in handover situations.

As mentioned in the May 26th Response, Luo fails to overcome the deficiencies of Lintulampi. Luo discloses a method for sending secure messages in telecommunication systems using public key encryption. Luo merely discloses ordinary GSM encryption key generation procedures (which are also described in the present application on pages 1-4). According to these procedures, cipher keys are always generated in an authentication center, AuC, which is typically located as part of a home location register HLR. Therefore, for roaming mobile stations, the cipher key, Kc, is calculated in the same authentication center, AuC, and then transferred to a network element arranging the ciphering in the visited network. Applicants note that these procedures are disclosed in Luo in col. 2, lines 32-35. Thus, the cipher key, Kc, is calculated when the mobile station connects to the visited network and is then used in the visited network. With such a method, all traffic between the mobile station and the visited network is transferred unciphered before the cipher key, Kc, is arranged in the mobile station and in the visited network. However, Luo does not disclose, teach or suggest cipher key generation according to the present invention. In particular, it is respectfully submitted that Luo does not disclose, teach or suggest, *inter alia*, the features of calculating a second cipher key in a first mobile communication network when the mobile station operates in the first mobile communication network and uses a first cipher key; transmitting

information necessary for calculating the second cipher key from the first mobile communication network to the mobile station; or calculating the second cipher key at the mobile station to be used for ciphering between the mobile station and the second network.

For at least the above reasons, Lintulampi and Luo or a combination thereof fail to teach or suggest all of the features recited by claim 1. Therefore, any reasonable combination of Lintulampi and Luo does not, in any way, result in the invention recited by claim 1. Claims 2-11 are patentable by virtue of their dependency from claim 1 and for the additional features recited therein.

Claim 12 is patentable over Lintulampi, Luo or a combination thereof for at least the same reasons set forth above related to claim 1. Dependent claims 13-18 are patentable by virtue of their dependency from claim 12 and for the additional features recited therein. Similarly, claims 19 and 20 are patentable over Lintulampi, Luo or a combination thereof for at least the same reasons set forth above related to claim 1.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-20 under 35 U.S.C. §103(a) based on Raivisto in view of Lintulampi and Luo are respectfully requested.

The rejection having been addressed, Applicants request issuance of a notice of allowance indicating the allowability of all pending claims. If anything further is necessary to place the application in condition for allowance, Applicants request that the Examiner contact Applicants' undersigned representative at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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Date: August 9, 2004

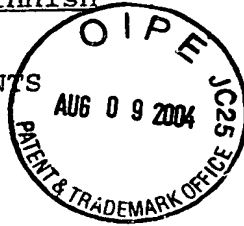
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Enclosure: Extract from the Finnish Trade Register

NATIONAL BOARD OF PATENTS
AND REGISTRATION
Trade Register
Arkadiankatu 6 A
00100 Helsinki
tel. (09) 6939 500



Page 1
Business ID: 0101120-3
Issued: 13.12.2001

EXTRACT FROM THE TRADE REGISTER

RECEIVED

AUG 12 2004

Technology Center 2600

Trade name:
Nokia Networks Oy

Business ID: 0101120-3
Trade Register number: 243,372
Date registered: 23.07.1976
Company form: limited company
Domicile: Helsinki
Content of extract: Information in register at 13.12.2001.

Register entries:

EXECUTION OF MERGER (Registered 01.10.2001)
With the permission of the register authority Marineland Oy
business ID 0196242-0, Nokia Networks Oy business ID 0101120-3,
Nokia Matkapuhelimet Oy business ID 0300326-6, Nokia Display
Products Oy business ID 0751877-7 and Nokia Multimedia Terminals
Oy business ID 0812093-9 have merged with Nokia Oyj business ID
0112038-9.

DISSOLUTION (Registered 01.10.2001)
The company has been dissolved.

ADDITIONAL INFORMATION:

Possible information on bankruptcy, liquidation or restructuring
procedures is not available from the system for the period up to
05.10.1995.

01.10.2001 Registered as dissolved

HISTORY OF TRADE NAME:

01.10.1999 - 30.09.2001 Nokia Networks Oy
31.07.1992 - 30.09.1999 Nokia Telecommunications Oy
11.06.1981 - 30.07.1992 Telenokia Oy
23.07.1976 - 10.06.1981 Televa Oy

Information retrieved from the Trade Register system. Printed on
stationery belonging to the National Board of Patents and
Registration the document is original without a signature.

Extract certified correct
Helsinki 19-12-2001
(signature)
Minna Saunanoja
Office secretary

For a true translation
7 January 2002

D. Morris

Virallinen kääntäjä
DAVID MORRIS
Authorized translator